# Water Quality Partnership Meeting
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## Water Quality Standards
## Bacterial Indicators: Comparative Disinfection Study

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The Water Quality Program funded a study of disinfection effectiveness at nine different municipal treatment plants. The following two issues below were addressed. The findings from the preliminary data analysis have relevance to the choice of bacterial indicators proposed in the ongoing triennial review:

1. The relative effectiveness of chlorine and ultra-violet disinfection techniques.
2. The potential compliance of POTWs with water quality-based limits, based on the proposed criteria for *E.coli*, enterococci, and fecal coliform. (WQ-based limit = proposed criteria x dilution at the edge of the chronic mixing zone.)

### Main Conclusions from the Study

1. Disinfection Effectiveness: UV is more effective than chlorine at killing the 3 bacterial indicators tested.

2. Summary of Potential Compliance with Water Quality-Based Limits based on the Proposed Criteria: All plants involved in the study are likely to comply with proposed limits for enterococci and *E.coli*. One plant had potential non-compliance associated with the existing fecal coliform limit. Based on split-sample analysis for enterococci and fecal coliform, the information used to develop the compliance scenarios included use of worst case fecal coliform counts and near-worst-case enterococci estimates. Split sample data are not available for *E. coli*.